

**Clarification No. - 01 dated 01/03/2024 to the Bidding Documents of 765kV Transformer Package 7TR-02-BULK for 7x500 MVA, 765/400 KV (1-Ph) Transformers under Bulk Procurement of 765kV & 400kV class Transformers & Reactors of various Capacities (Lot-7).
Spec. No.: CC/NT/W-TR/DOM/A00/24/01887**

Sl. No.	Volume/ Section/ Clause	Description as per Bid Document	Bidder's Query / Clarification	POWERGRID's Reply
Technical Specification, 765kV Auto-transformer C/ENGG/MODEL-SPEC/TRF Rev. 08				
1.	6.11 pg 15/79, 6.12 pg 15/79	Cl. 6.11 & 6.12: Any special cable required for shielding purpose, for connection between PT100 temperature sensor and transducer, shall be in the scope of Contractor. 4-20mA signal shall be wired to Digital RTCC panel / BCU for further transfer data to SCADA through IS/IEC 61850 compliant communications.	As per section project exclusions, cables between control room (RTCC) to MB/CMB will not be in our scope of supply. Hence the mentioned clause not applicable. Kindly confirm.	As per clause no 6.11 & 6.12 of Section- 765kV Auto Transformer Rev-08, Any special cable required for shielding purpose are in scope of the bidder.
2.	Cl.13.4.3 pg 26/79	Cl. 13.4.3: Auxiliary power supply distribution scheme shall be submitted for approval. Supply and laying of Power, Control and special cables from common marshalling box to individual MB/Cooler Control Cubicle (including spare unit) & further distribution from IMB/CCC to all accessories is in the scope of the contractor. Further any special cable (if required) from CMB to Owner's Control Panels is also in the scope of the contractor	Only Supply of Power, Control, and special cables from individual marshalling box to common marshalling box is in our scope of supply. trenches/ laying of cables between IMB to CMB is not in our scope.	Bidder to quote as per provisions of bidding documents.
3.		Buchholz Relay, Magnetic Oil Level Gauge, Pressure Relief Device & Sudden pressure relay to be wired through un-armoured cable of 1.5sq.mm (minimum), inside GI conduit, with no part exposed. Cable shall be protected by flexible stainless-steel pipe, at both ends as per requirement. Proper sealing arrangement to be provided at both ends to avoid ingress of water.	As per past supply to various sites of PGCIL and CEA guidelines, for all equipments mounted on transformer, we will provide armoured cable in cable tray (till IMB), which is suitable for outdoor applications instead of mentioned conduit. Kindly accept. Also, as per STANDARD TECHNICAL DATA SHEET - 1.1kV GRADE PVC CONTROL CABLES sl.no.13, it is mentioned all the control cables are armoured. Hence, kindly accept armoured cable with cable tray.	Bidder to comply the requirement mentioned in technical specifications.

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Technical Specification, Section–Project/Rev 00				
4.	Cl. 2.2(d) pg 3/6	Cl. 2.2 (e): All cables (Power, Control, shielded twisted pair cable for 4-20mA signal & any special cable as required from individual Transformer unit to Cooler Control Cabinet /Individual Marshalling Box (IMB)/OLTC Drive Mechanism Box (DM) / any other cubicle (associated with 765kV Class Transformer as applicable) is deemed to be included & shall be treated as Part of each 1-phase 765kV class Transformer. 1. FO cable (300 m) per 1-phase 765kV class Transformer unit 2. One No. CMB shall be supplied for 2 x 1-Ph or 3 x 1-Ph 765kV Class Transformer unit at one location. LIU & associated Patch cords & One Ethernet switch, as part of each CMB, shall also be provided. 3. Supply of CMB is not envisaged for delivery of only a single Unit of 765kV Class Transformer & No recovery shall be made against the same.	As mentioned in the clause the scope of cables will be as below: 1.FO cable 300m per 1-Ph transformer will be supplied. (from MB to control panel). 2. As per present scope for 7Nos 1Ph transformers, hence 2Nos CMB will be supplied. 3. Noted and Not applicable for present scope. Our scope is limited to above mentioned points only. Kindly confirm our understanding. As site details are not clear at this stage (AVR model and existing scheme at site not available), Wiring and integration will not be in our scope. Kindly accept.	Bidder may Quote as per Bidding document
5.	Cl 4 pg 5/6	PHYSICAL AND OTHER DESIGN DATA	Kindly provide details below for site location. 1. Site location 2. Coastal area requirement applicability. 3. RTV coating applicability. 4. Seismic zone per each site.	Bidder to quote as per provisions of bidding documents
6.	Cl 4 pg 5/6	Seismic zone as per IS 1893 (Part 1) Seismic Zone upto Zone-IV	For 800kV/2500A OIP Bushing, suppliers don't have the seismic test reports suitable for Zone IV, hence we propose to use 800/2000A RIP bushing instead of 800/2500A OIP bushing. kindly accept deviation in current rating and proposed RIP bushing.	Bidder to quote as per provisions of bidding documents

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7.	Page 35 of 79	<p>The Individual Marshalling Box, Common Marshalling Box, Junction box and all other outdoor cubicles shall be made of stainless-steel sheet of minimum grade of SS304 (SS 316 for coastal area) and of minimum thickness of 1.6 mm.</p> <table border="1" data-bbox="528 496 981 592"> <tr> <td>Altitude</td> <td>Less than 1000 meter above mean sea level (MSL)</td> </tr> <tr> <td>Snow fall</td> <td>NIL</td> </tr> <tr> <td>Seismic Zone</td> <td>As per IS 1893 (Part 1) – Seismic Zone upto Zone - IV</td> </tr> <tr> <td>Wind Zone</td> <td>NBC 2016- 47 m/s</td> </tr> <tr> <td>Min./Max. Ambient Temperature</td> <td>0 / 50 degree centigrade</td> </tr> </table>	Altitude	Less than 1000 meter above mean sea level (MSL)	Snow fall	NIL	Seismic Zone	As per IS 1893 (Part 1) – Seismic Zone upto Zone - IV	Wind Zone	NBC 2016- 47 m/s	Min./Max. Ambient Temperature	0 / 50 degree centigrade	The Coastal Area Consideration is not mentioned in Section project hence we are not considering the same in these tenders. Please confirm	Bidder understanding is generally in order.
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